

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-3 (Canceled).

A1
Claim 4 (Currently Amended) An essentially purified HPV18 L1 protein comprising a sequence of amino acids as set forth in SEQ ID NO:2 ~~encoded by the DNA molecule of Claim 1.~~

Claims 5-10 (Canceled)

Claim 11 (Currently Amended) Virus-like particles comprised of recombinant L1 protein, or recombinant L1 + L2 proteins of human papillomavirus 18, wherein the L1 protein comprises a sequence of amino acids as set forth in SEQ ID NO:2 and the L2 protein comprises a sequence of amino acids as set forth in SEQ ID NO:4 ~~the virus-like particles being at least 60% pure.~~

Claim 12 (Original) The virus-like particles of claim 11 wherein the recombinant L1 protein or the recombinant L2 proteins is produced in yeast.

Claim 13 (Currently Amended) A method of producing the virus-like particles of claim 11, comprising:

(a) transforming yeast with a recombinant DNA molecule encoding papillomavirus L1 protein ~~or papillomavirus L2 protein~~ or papillomavirus L1 + L2 proteins; wherein the L1 protein comprises a sequence of amino acids as set forth in SEQ ID NO:2 and the L2 protein comprises a sequence of amino acids as set forth in SEQ ID NO:4

(b) cultivating the transformed yeast under conditions that permit expression of the recombinant DNA molecule to produce the recombinant papillomavirus protein; and

(c) isolating the recombinant papillomavirus protein to produce virus-like particles of Claim [1] 11.

Claim 14 (Original) Recombinant papillomavirus protein produced by the method of claim 13.

Claim 15 (Original) A vaccine comprising the virus-like particles of Claim 11.

Claim 16 (Original) Pharmaceutical compositions comprising the virus-like particles of Claim 11.

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Claim 17 (Original) A method of preventing papillomavirus infection comprising administering the vaccine of Claim 15 to a host.

Claim 18-19 (Canceled).

Claim 20 (Original) A method for inducing an immune response in an animal comprising administering the virus-like particles of Claim 11 to an animal.
